

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 22, 2005, 16:19:29 ; Search time 29.9558 Seconds
(without alignments)
844.779 Million cell updates/sec

Title: US-09-889-609B-8
Perfect score: 1740
Sequence: 1 MCAQYICISPADVEKAHINIQ.....TSLNWVQQAERPAPYQTVSV 339

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

- 1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
- 2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfiles1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1582.5	90.9	340	4	US-09-789-300A-2
2	606	34.8	332	4	US-09-543-681A-4645
3	573	32.9	328	4	US-09-328-352-4536
4	543	31.2	374	4	US-09-252-991A-31294
5	480	27.6	334	4	US-09-489-039A-14107
6	457.5	26.3	524	4	US-09-328-352-4536
7	450.5	25.9	411	4	US-09-328-352-4536
8	434	24.9	405	4	US-09-302-540-12639
9	418	24.0	525	4	US-09-543-681A-4364
10	406.5	23.4	677	4	US-09-252-991A-22442
11	379	21.8	521	4	US-09-489-039A-8050
12	365	21.0	424	3	US-09-134-001C-3876
13	365	21.0	424	4	US-09-710-279-1046
14	359.5	20.7	441	1	US-08-403-866-10
15	355	20.4	518	4	US-09-540-236-3648
16	352	20.2	507	4	US-09-424-978B-34
17	347.5	20.0	520	4	US-09-328-352-4536
18	342.5	19.7	421	4	US-09-107-433-2928
19	336.5	19.3	416	4	US-09-583-110-3878
20	303	17.4	436	3	US-08-669-378-2
21	303	17.4	436	3	US-08-669-378-12
22	302	17.4	436	3	US-08-669-378-4
23	302	17.4	436	3	US-08-669-378-6
24	302	17.4	436	3	US-08-669-378-10
25	300	17.2	436	3	US-08-669-378-8
26	296.5	17.0	378	4	US-09-789-300A-4
27	278.5	16.0	329	4	US-09-843-297-2

28	261.5	15.0	347	4	US-09-949-016-10697	Sequence 10697, A
29	254.5	14.6	325	3	US-09-088-435-1	Sequence 1, Appli
30	253	14.5	331	4	US-09-252-991A-29393	Sequence 29393, A
31	252.5	14.5	328	4	US-09-949-016-6763	Sequence 6763, Ap
32	242.5	13.9	392	4	US-09-424-978B-29	Sequence 29, Appl
33	229	13.2	367	3	US-09-134-001C-4168	Sequence 4168, Ap
34	219.5	12.6	373	4	US-09-248-796A-18227	Sequence 18227, A
35	205.5	11.8	308	4	US-09-583-110-4369	Sequence 4369, Ap
36	205.5	11.8	317	4	US-09-107-433-4532	Sequence 4532, Ap
37	204.5	11.8	193	4	US-09-248-796A-17694	Sequence 17694, A
38	203	11.7	387	4	US-09-248-796A-18228	Sequence 18228, A
39	196	11.3	311	4	US-09-962-357-5	Sequence 5, Appli
40	191	11.0	225	4	US-09-134-000C-3983	Sequence 3983, Ap
41	185.5	10.7	550	4	US-09-538-092-1075	Sequence 1075, Ap
42	185.5	10.7	551	1	US-08-120-960-2	Sequence 2, Appli
43	185.5	10.7	551	3	US-09-347-878-9	Sequence 9, Appli
44	184	10.6	311	4	US-09-252-991A-25027	Sequence 25027, A
45	182.5	10.5	308	4	US-09-107-532A-3925	Sequence 3925, Ap

ALIGNMENTS

RESULT 1

US-09-789-300A-2

; Sequence 2, Application US/09789300A

; Patent No. 6458576

; GENERAL INFORMATION:

; APPLICANT: Meyers, Rachel

; APPLICANT: Rudolph-Owen, Laura A.

; TITLE OF INVENTION: 22406, A No. 6458576el Human Pyridoxal-Phosphate

; FILE REFERENCE: 35800/208926

; CURRENT APPLICATION NUMBER: US/09/789,300A

; CURRENT FILING DATE: 2001-02-20

; PRIOR APPLICATION NUMBER: US 60/183,208

; PRIOR FILING DATE: 2000-02-17

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 2

; LENGTH: 340

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-789-300A-2

Query Match	90.9%;	Score 1582.5;	DB 4;	Length 340;
Best Local Similarity	89.7%;	Pred. No. 1.6e-165;		
Matches	305;	Conservative	19;	Mismatches 15; Indels 1; Gaps 1;
QY	1	MCAQYICISPADVEKAHINIODSIHLTPVLTSSILNQTGRNLFKCELFQKTSFKIRGA	60	
Db	1	MCAQYICISPADVEKAHINIRDSIHLTPVLTSSILNQTGRNLFKCELFQKTSFKIRGA	60	
QY	61	LNARGLIIPDTPEEKPAVHTSSGNHGOALTAAKLEGIPAVIVVQTPAPNCKLAIQA	120	
Db	61	LNARVLPDALERKPAVHTSSGNHGOALTAAKLEGIPAVIVVQTPADCKKLAQA	120	
QY	121	YGASIVYCPSPDESREKVTORIMQETEGILVHNQBPVIAAGGTIALEVLNQPVLVDAL	180	
Db	121	YGASIVYCPSPDESREKVTORIMQETEGILVHNQBPVIAAGGTIALEVLNQPVLVDAL	180	
QY	181	VVPVGGGGVAGIATITKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLPPTIADGV	240	
Db	181	VVPVGGGGVAGIATITKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLPPTIADGV	240	
QY	241	KSGIGLNTWPIIRDLVDVFTVTEDEIKATQLVWGRMKLLIIEPTAGVAAVLSSHQFQT	300	
Db	241	KSGIGLNTWPIIRDLVDVFTVTEDEIKATQLVWGRMKLLIIEPTAGVAAVLSSHQFQT	300	
QY	301	VSPVKNVICVLSGGNVDLT-SLNWVQQAERPAPYQTVSV	339	
Db	301	VSPVKNVICVLSGGNVDLTSSITWVQQAERPASYQSVSV	340	

Q_y

[illegible]

```
Db 246 ELTTQIAKHFVDDIVVVTEDMIEBAIALLLNIETKTCGAGATGIAAIMSR-----PDL 299
Qy 306 ---KNVCIVLSGGNVD 318
Db 300 FLGHKGVVLSGGNID 315

RESULT 8
US-09-902-540-12639
; Sequence 12639, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; PRIOR FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 12639
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
US-09-902-540-12639

Query Match 24.9%; Score 434; DB 4; Length 405;
Best Local Similarity 32.8%; Pred. No. 8.1e-39;
Matches 105; Conservative 64; Mismatches 143; Indels 8; Gaps 5;

Qy 7 ISPADVEKAHINIODSIHLTPVLTSSILNQ-IAGRNLPFKCELFQKTSFKIRGALNAIR 65
Db 2 VTLEDIOAERLNSAIRTPCQSDYYTETECAAVFFKLENLQRTGAFKRGALNKL 61
Qy 66 GLIPDTPPEKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVQTPAPNCK-KLAIQAYGAS 124
Db 62 TL---TEDERRRGVIAASAGNAGQVAYHARRLGVSATIVMPERTPLIKVSRTRDDYGAR 118
Qy 125 IVVCDPSDESREKVTQIMQETEGILVHPNOEPAVIAGQGTIALLEVNLQVPLVDALVVPV 184
Db 119 VLKGTNYDEAYAEALRIQAEADVTFHPFNDAHVIAAGQGTIGLELLEQCPDLEVLVPI 178
Qy 185 GGGGWAGIAITIKALKPSVKVYAABPSNADDCYQSKLKGELTPNLHPPTIADGVK-SS 243
Db 179 GGGGLSGIACALKETRPDRVVGVOAETTASMKASVEAGERVLLAAAGTTIADGIAVKR 238
Qy 244 IGLNTWPIIRDLDVDDVFTVTEDEIKYATQLVWGRMKLLIEPTAGVALAAVLSQHFQTVSP 303
Db 239 VGDLTFFMVQKYVDEVVAVDEEBIAAAILTLLEQKSVVEGAGAVGLAALLSG--DVPAA 296
Qy 304 EVKNVCIVLSGGNVDLTSLN 323
Db 297 RGRRTAILLSGGNIDMNVIS 316

RESULT 9
US-09-543-681A-4364
; Sequence 4364, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543,681A
; CURRENT FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 4364
```

```
; LENGTH: 525
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-4364

Query Match 24.0%; Score 418; DB 4; Length 525;
Best Local Similarity 34.3%; Pred. No. 7.3e-37;
Matches 113; Conservative 66; Mismatches 130; Indels 20; Gaps 9;

Qy 8 SPADVEKAHIN--IQDSIHLTPVLTSSILNQIAGRNLFPKCELFQKTSFKIRGALNAIR 65
Db 13 SSAEYLKAALSAPVYEAAVVTPLQEMAKISQRLNTILVKREDRQPVHSPKLRGAYNMIA 72
Qy 66 GLIPDTPPEKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVQTPAPNCKKLAIQAYGA-S 124
Db 73 GL---TPEQKAKGVVITASAGNHAQGVALSANRGMVKALIVMPIATADIKVDVAVRQFGEA 129
Qy 125 IVVCDPSDESREKVTQIMQETEGILVHPNOEPAVIAGQGTIALLEVNLQVPLVDALVVPV 184
Db 130 LLYGANFDEAKAKAI-ALAKEMGYTFVPPFDHPAVIAGQATLAWELLQDDVHLDRIFVPV 188
Qy 185 GGGGWAGIAITIKALKPSVKVYAABPSNADDCYQSKLKGELTPNLHPPE-----TIADG 239
Db 189 GGGGLIAGVAVLIKQLMPEIKIIGVEAEDA-ACLKAALFAG-----HPVELPRVGLFAEG 242
Qy 240 VK--SSIGLNTWPIIRDLDVDDVFTVTEDEIKYATQLVWGRMKLLIEPTAGVALAAVLSQHF 298
Db 243 VAVKRIGDETFRLCQKYVDDVITVDSDAICAAVKDLFEDVRAIAEPFSGALALAG-LKKYV 301
Qy 299 QTVSPEVKNCVILSGNVDLTSLNWWGQ 327
Db 302 EEHOIKGERLAHVLSGANVNFHGLRYVSE 330

RESULT 10
US-09-252-991A-22442
; Sequence 22442, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 22442
; LENGTH: 677
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-22442

Query Match 23.4%; Score 406.5; DB 4; Length 677;
Best Local Similarity 33.0%; Pred. No. 2.1e-35;
Matches 109; Conservative 62; Mismatches 132; Indels 27; Gaps 9;

Qy 26 TPVLTSSILNQIAGRNLFPKCELFQKTSFKIRGALNAIRLIPDTPPEKPKAVVTHSSG 85
Db 194 TPLQVAPQLSQRLLGNRLKREDLQPVFSFKIRGAYTRVARL---SDEKARGVITASAG 250
Qy 86 NHGQALTYAAKLEGIPAYIVVQTPAPNCKKLAIQAYGA-SIVVCDPSDESREKVTQIRINQ 144
Db 251 NHAQGLALAAQRLGVRVIMVMPRTTPELKVGVLAGGEGALLHGDAFPDAAHALAQ--LA 308
Qy 145 ETEGI-LVHPNOEPAVIAGQGTIALLEVNLQ-VPLVDALVVPVGGGWAGIAITIKALKP 202
Db 309 EREGMTFFVPPYDDPDVIAQGQTVAMEILRQHSRLDAIFVPVGGSLIAGIAAYVKKLRP 368
Qy 203 SVKVYAABPSNADDCYQSKLKGELTPNLHPPTIADGVK--SSIGLNTWPIIRDLDVDDVFT 261
```

Db 369 DIRVIGEPDS-NCLQALAAAGERVVLGGVLFADGVAVQAQACNFVCKDHDVEVIT 427
QY 262 VTDEIKYATQLVWGRMKLLIEPTAGVALAVALSQRHFQTVSPVKNVCIVLSGGNVDLTS 321
Db 428 VGSDEICAAIKDIYDDTRSITEPAGALAVAGI-KKYVARERTEGQTLVAIDSGANINFR 486
QY 322 LNWVGQ-----AERPAPYQ 335
Db 487 LRHVAERAELEQREAIIVTVAERPGSFK 516

RESULT 11

US-09-489-039A-8050
; Sequence 8050, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/489,039A
; PRIOR FILING DATE: 2000-01-27
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 8050
; LENGTH: 521
; TYPE: PR
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-8050

Query Match 21.8%; Score 379; DB 4; Length 521;
Best Local Similarity 32.0%; Pred. No. 1.4e-32;
Matches 101; Conservative 67; Mismatches 130; Indels 18; Gaps 8;
QY 19 IQDSIHLTPVLTSILNQIAGRNLFKCELPQKTSFKIRGALNAIRGLIPDTPPEKPKA 78
Db 32 VYEAQKTPLOKMDKLSRLDNVILVKREDRQPVHFKLRGAYAMMSL---TAEQKSHG 88
QY 79 VVTHSSGNHQAALTYAAKLEGIPAYIVPOTAPNCKKLAIQAYGASIVVCDPS-DESREK 137
Db 89 VITASAGNAAGVAFSASRLGVKALIVMPVATADIKVDAVRGEGEVLLHGANFDEAKAR 148
QY 138 VTQRMQETEGILVHPNQEPVIAAGOGTIALEVLNQVPLVDALVVPVGGGVMVAGIATI 197
Db 149 AIE-LAQOQGFVWPFDPHEWVIAAGOTLALQLQDAHIDRVFVPGVGGGLAAGVAVLI 207
QY 198 KALKPSVYVAAEPSNADD--CYQSKLKGELTNPVHPETIADGVK-SSIGLNTWPIIRD 254
Db 208 KQLMPOIKVIAVE---AEDSACLKAALDAGHPVDLPVGLFABGVAVKRGIDETFLCOE 264
QY 255 LVDDVFTVTEDEIKYATQLVWGRMKLLIEPTAGVALAVALSQRHFQTVSPVKNVCIV 311
Db 265 YLDDIITVSDALCAWKOLFEDVRAVAFSGALALAGMKKYIAQH-----NIRGERLAHI 320
QY 312 LSGGNVDLSLNVWGQ 327
Db 321 LSGANVNFHCLRVSE 336

RESULT 12

US-09-134-001C-3876
; Sequence 3876, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964

; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3876
; LENGTH: 424
; TYPE: PR
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3876

Query Match 21.0%; Score 365; DB 3; Length 424;
Best Local Similarity 29.8%; Pred. No. 3.5e-31;
Matches 97; Conservative 60; Mismatches 152; Indels 16; Gaps 7;
QY 7 ISFADVEKAHINIQDSIHLTPVLTSILNQIAGRNLFKCELPQKTSFKIRGALNAIRG 66
Db 9 VSTKDIDEAYLRKLNIVKETPLQFDHYLSQKNCNVYLKREDLQWVRSFKLRGAYNAISV 68
QY 67 LIPDTPPEKPKAVVTHSSGNHQAALTYAAKLEGIPAYIVPOTAPNCKKLAIQAYGAS-- 124
Db 69 L---SNEEKNKGITCASAGNHAQGVAYTAKKLNKAVIFMPVTTTPROKINQVRFPGDSNV 125
QY 125 --IVYCDPSDESREKVTQRIQETEGILVHPNQEPVIAAGOGTIALEVLNQV---PLVD 178
Db 126 EIVLIGDTFDHCLAQALNNTYKQHKMN-FIDPFNNVTIAGGTILAKELINQAEKEDKTFD 184
QY 179 ALVVPVGGGVMVAGIATIKALKPSVYVAAEPSNADDCCYQSKLKGELTNPVHPETIAD 238
Db 185 YVFAAIGGGGLISGVSTYFKAHSPHTKIIGVEPTGASSMYQSVVINHSIVTLENIDKFVD 244
QY 239 GVK-SSIGLNTWPIIRDVDDVFTVTEDEIKYATQLVWGRMKLLIEPTAGVALAVALSQR 297
Db 245 GASVARVGDITFDIAKDKVDVYQVDEGAVCVSTILDMYSKQAIVAEP-AGALSVSALAEQ 303
QY 298 FQTVSPVKNVCIVLSGGNVLDLSL 322
Db 304 KKQI---ENKTIIVCSGGNNDINRM 326

RESULT 13

US-09-710-279-1046
; Sequence 1046, Application US/09710279
; Patent No. 6703492
; GENERAL INFORMATION:
; APPLICANT: KIMMERLY, WILLIAM JOHN
; TITLE OF INVENTION: STAPHYLOCOCCUS EPIDERMIDIS NUCLEIC ACIDS AND PROTEINS
; FILE REFERENCE: PU3480US
; CURRENT APPLICATION NUMBER: US/09/710,279
; CURRENT FILING DATE: 2000-11-09
; PRIOR APPLICATION NUMBER: 60/164,258
; PRIOR FILING DATE: 1999-11-09
; NUMBER OF SEQ ID NOS: 4472
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1046
; LENGTH: 424
; TYPE: PR
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: amino acid sequence
US-09-710-279-1046

Query Match 21.0%; Score 365; DB 4; Length 424;
Best Local Similarity 29.8%; Pred. No. 3.5e-31;
Matches 97; Conservative 60; Mismatches 152; Indels 16; Gaps 7;
QY 7 ISFADVEKAHINIQDSIHLTPVLTSILNQIAGRNLFKCELPQKTSFKIRGALNAIRG 66
Db 9 VSTKDIDEAYLRKLNIVKETPLQFDHYLSQKNCNVYLKREDLQWVRSFKLRGAYNAISV 68
QY 67 LIPDTPPEKPKAVVTHSSGNHQAALTYAAKLEGIPAYIVPOTAPNCKKLAIQAYGAS-- 124
Db 69 L---SNEEKNKGITCASAGNHAQGVAYTAKKLNKAVIFMPVTTTPROKINQVRFPGDSNV 125

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 22, 2005, 16:23:43 ; Search time 88.3697 Seconds
(without alignments)
1276.639 Million cell updates/sec

Title: US-09-889-609B-8

Perfect score: 1740

Sequence: 1 MCAQYCISFADVEKAHINIO.....TSLNWVGQARPAQTVSV 339

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1424015 seqs, 332791073 residues

Total number of hits satisfying chosen parameters: 1424015

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA.*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
- 6: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
- 7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
- 8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
- 9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
- 10: /cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep.*
- 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep.*
- 17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep.*
- 19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1582.5	90.9	340	9	US-09-789-300A-2
2	1582.5	90.9	340	14	US-10-164-966-2
3	1582.5	90.9	340	15	US-10-240-800-2
4	1578.5	90.7	340	14	US-10-240-466-2
5	988	56.8	228	15	US-10-264-237-2089
6	756.5	43.5	339	16	US-10-437-963-106995
7	743.5	42.7	379	15	US-10-425-114-49567
8	640.5	36.8	280	15	US-10-425-114-62761
9	499.5	33.2	247	15	US-10-424-599-155063
10	499.5	28.7	252	16	US-10-767-701-43071
11	485.5	27.9	409	14	US-10-156-761-10839
12	476	27.4	329	15	US-10-413-943-33
13	392.5	22.6	576	15	US-10-413-943-29

14	384	22.1	514	15	US-10-413-943-31	Sequence 11, Appl
15	380	21.8	602	15	US-10-424-599-266101	Sequence 266101,
16	378	21.7	514	15	US-10-413-943-32	Sequence 32, Appl
17	375	21.6	608	15	US-10-425-114-38570	Sequence 38570, A
18	374.5	21.5	499	15	US-10-425-114-39197	Sequence 39197, A
19	373.5	21.5	511	15	US-10-425-114-55647	Sequence 55647, A
20	371.5	21.4	595	15	US-10-413-943-27	Sequence 27, Appl
21	371	21.3	502	15	US-10-413-943-8	Sequence 8, Appl
22	371	21.3	532	15	US-10-413-943-12	Sequence 12, Appl
23	371	21.3	539	15	US-10-413-943-10	Sequence 10, Appl
24	371	21.3	545	15	US-10-413-943-20	Sequence 20, Appl
25	371	21.3	592	15	US-10-413-943-2	Sequence 2, Appl
26	371	21.3	592	15	US-10-413-943-4	Sequence 4, Appl
27	371	21.3	592	15	US-10-413-943-64	Sequence 64, Appl
28	371	21.3	592	15	US-10-413-943-67	Sequence 67, Appl
29	371	21.3	609	15	US-10-413-943-6	Sequence 6, Appl
30	371	21.3	609	15	US-10-413-943-63	Sequence 63, Appl
31	371	21.3	617	16	US-10-437-963-138876	Sequence 138876
32	371	21.3	751	15	US-10-413-943-59	Sequence 59, Appl
33	358	20.6	590	15	US-10-413-943-26	Sequence 26, Appl
34	357.5	20.5	310	9	US-09-738-626-4591	Sequence 4591, Ap
35	336.5	19.3	416	17	US-10-472-928-750	Sequence 750, App
36	307	17.6	436	9	US-09-738-626-5828	Sequence 5828, Ap
37	296.5	17.0	378	9	US-09-789-300A-4	Sequence 4, Appl
38	296.5	17.0	378	14	US-10-164-966-4	Sequence 4, Appl
39	295	17.0	329	16	US-10-767-701-37804	Sequence 37804, A
40	290.5	16.7	327	15	US-10-287-226-670	Sequence 670, App
41	285.5	16.4	313	15	US-10-287-226-673	Sequence 673, App
42	278.5	16.0	329	15	US-10-377-072-17	Sequence 17, Appl
43	278.5	16.0	329	16	US-10-377-072-17	Sequence 17, Appl
44	274.5	15.8	329	15	US-10-264-237-2128	Sequence 2128, Ap
45	274.5	15.8	329	15	US-10-114-230-164	Sequence 164, App

ALIGNMENTS

RESULT 1

US-09-789-300A-2
; Sequence 2, Application US/09789300A
; Publication No. US20020115137A1
; GENERAL INFORMATION:
; APPLICANT: Meyers, Rachel
; APPLICANT: Rudolph-Owen, Laura A.
; TITLE OF INVENTION: 22406, A No. 6458576el Human Pyridoxal-Phosphate
; TITLE OF INVENTION: Dependent Enzyme Family Member and Uses Therefore
; FILE REFERENCE: 35800/208926
; CURRENT APPLICATION NUMBER: US/09/789,300A
; CURRENT FILING DATE: 2001-02-20
; PRIOR APPLICATION NUMBER: US 60/183,208
; PRIOR FILING DATE: 2000-02-17
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-789-300A-2

Query Match	90.9%;	Score	1582.5;	DB	9;	Length	340;
Best Local Similarity	89.7%;	Pred. No.	3.7e-146;				
Matches	305;	Conservative	19;	Mismatches	15;	Indels	1;
QY	1	MCAQYCISFADVEKAHINIODSIHLTPVLVTSSITLNOIAGRNLFKPCELFQKTGSPKIRGA	60				
Db	1	MCAQYCISFADVEKAHINIRDSIHLTPVLVTSSITLNOITGRNLFKPCELFQKTGSPKIRGA	60				
QY	61	LNAIRGLIPDTPBEKPAKVTVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPNCKKLAIOA	120				
Db	61	LNAVRSIVPDALERKPAKVTVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPDCKKLAIOA	120				
QY	121	YGASIVYCDPSDESREKVTQRMQETEGILVHPNQEPVIAAGGTIALEVIVNQVPLVDAL	180				

Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHNPQEPVAVIAGQGTIALEVLNQVPLVDAL 180
QY 181 VVPVGGGMMVAGIAITIKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
QY 301 VSPEVKNCIVLSGGNVDLT-SLNWVGQAEPAQYQTVSV 339
Db 301 VSPEVKNCIVLSGGNVDLTSSITWVKQAEPAQYQSVSV 340

RESULT 2

US-10-164-966-2
; Sequence 2, Application US/10164966
; Publication No. US2003006439A1
; GENERAL INFORMATION:
; APPLICANT: Bandaru, Rajasehkar
; APPLICANT: Glucksmann, Maria Alexandra
; APPLICANT: Meyers, Rachel E.
; APPLICANT: Rudolph-Owen, Laura A.
; TITLE OF INVENTION: Novel Nucleic Acid Sequences Encoding Melanoma
; TITLE OF INVENTION: Associated Antigen Molecules, Aminotransferase
; TITLE OF INVENTION: Molecules, ATPase Molecules, Acyltransferase Molecules,
; TITLE OF INVENTION: Pyridoxal-Phosphate Dependant Enzyme Molecules and Uses
; TITLE OF INVENTION: Therefor
; FILE REFERENCE: 35800/247400
; CURRENT APPLICATION NUMBER: US/10/164,966
; CURRENT FILING DATE: 2002-06-07
; PRIOR APPLICATION NUMBER: 10/034,864
; PRIOR FILING DATE: 2001-12-27
; PRIOR APPLICATION NUMBER: 60/258,517
; PRIOR FILING DATE: 2000-12-28
; PRIOR APPLICATION NUMBER: 09/996,194
; PRIOR FILING DATE: 2001-11-28
; PRIOR APPLICATION NUMBER: 60/250,348
; PRIOR FILING DATE: 2000-11-30
; PRIOR APPLICATION NUMBER: 60/250,073
; PRIOR FILING DATE: 2000-11-30
; PRIOR APPLICATION NUMBER: 60/253,878
; PRIOR FILING DATE: 2000-11-29
; PRIOR APPLICATION NUMBER: 60/250,338
; PRIOR FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: 09/908,928
; PRIOR FILING DATE: 2001-07-19
; PRIOR APPLICATION NUMBER: 60/220,465
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: 09/908,180
; PRIOR FILING DATE: 2001-07-18
; PRIOR APPLICATION NUMBER: 60/219,740
; PRIOR FILING DATE: 2000-07-20
; PRIOR APPLICATION NUMBER: 09/887,389
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: 60/214,138
; PRIOR FILING DATE: 2000-06-26
; PRIOR APPLICATION NUMBER: 09/789,300
; PRIOR FILING DATE: 2001-02-20
; PRIOR APPLICATION NUMBER: 60/183,208
; PRIOR FILING DATE: 2000-02-17
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens

US-10-164-966-2

Query Match 90.9%; Score 1582.5; DB 14; Length 340;
Best Local Similarity 89.7%; Pred. No. 3.7e-146;
Matches 305; Conservative 19; Mismatches 15; Indels 1; Gaps 1;
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHNPQEPVAVIAGQGTIALEVLNQVPLVDAL 180
Db 181 VVPVGGGMMVAGIAITIKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
QY 301 VSPEVKNCIVLSGGNVDLT-SLNWVGQAEPAQYQTVSV 339
Db 301 VSPEVKNCIVLSGGNVDLTSSITWVKQAEPAQYQSVSV 340

QY 1 MCAQYCSISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCELFQKTSFKIRGA 60
Db 1 MCAQYCSISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCELFQKTSFKIRGA 60
QY 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPOTPAPNCKKLAIOA 120
Db 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPOTPAPNCKKLAIOA 120
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHNPQEPVAVIAGQGTIALEVLNQVPLVDAL 180
Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHNPQEPVAVIAGQGTIALEVLNQVPLVDAL 180
QY 181 VVPVGGGMMVAGIAITIKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
QY 301 VSPEVKNCIVLSGGNVDLT-SLNWVGQAEPAQYQTVSV 339
Db 301 VSPEVKNCIVLSGGNVDLTSSITWVKQAEPAQYQSVSV 340

RESULT 3

US-10-240-800-2
; Sequence 2, Application US/10240800
; Publication No. US20030212262A1
; GENERAL INFORMATION:
; APPLICANT: Merck & Co., Inc.
; TITLE OF INVENTION: HUMAN SERINE RACEMASE
; FILE REFERENCE: 20642Y-PCT
; CURRENT APPLICATION NUMBER: US/10/240,800
; CURRENT FILING DATE: 2002-10-03
; PRIOR APPLICATION NUMBER: 60/194,451
; PRIOR FILING DATE: 2000-04-04
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Fast-SEQ for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo Sapien

US-10-240-800-2

Query Match 90.9%; Score 1582.5; DB 15; Length 340;
Best Local Similarity 89.7%; Pred. No. 3.7e-146;
Matches 305; Conservative 19; Mismatches 15; Indels 1; Gaps 1;
QY 1 MCAQYCSISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCELFQKTSFKIRGA 60
Db 1 MCAQYCSISFADVEKAHINIQDSIHLTPVLTSSILNQIAGRNLPFKCELFQKTSFKIRGA 60
QY 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPOTPAPNCKKLAIOA 120
Db 61 LNAIRGLIPDTPPEKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPOTPAPNCKKLAIOA 120
QY 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHNPQEPVAVIAGQGTIALEVLNQVPLVDAL 180
Db 121 YGASIVYCEPSDESRENVAKRVTETEGIMVHNPQEPVAVIAGQGTIALEVLNQVPLVDAL 180
QY 181 VVPVGGGMMVAGIAITIKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
Db 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPNADDCYQSKLKGELTPNLHPPETIADGV 240
QY 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
Db 241 KSSIGLNTWPIIRDLDVDDFTVTEDEIKATQLVWERMKLLIEPTAGVAAVLVLSQHFQT 300
QY 301 VSPEVKNCIVLSGGNVDLT-SLNWVGQAEPAQYQTVSV 339
Db 301 VSPEVKNCIVLSGGNVDLTSSITWVKQAEPAQYQSVSV 340

Db 77 FALDDD---EASKGVVTHSSGNHAAVALAAKLGIPAIYIIPRNAPACKVDNVRKYGCH 133
QY 125 IYVCDPDESREKVTQRMQETGILVHPNOEPVIAAGQGTIALEVLNQVPLVDALVVPV 184
Db 134 IIVSDVSIESRESVAKRQOEBTGAILVHPFNKNKTISGGQTSVLELEVEPEIDTIIVPI 193
QY 185 GGGMVAGIATITKALPKSVKVAAPSNADDCYQSKLGELTPNLHPPTIADGVKSSI 244
Db 194 SGGGLISGVALAAKAINPSIRILAAEPKGADDSQAQKAAGKII-TLPSTNTIADGLRAFL 252
QY 245 GLNTWPIIRDVDDVFTTDEIKYATQLVWGRMKLLIETPTAGVLAALVLSQHFQTVSP- 303
Db 253 GDLTPWVRDLVDDIIVDDNAIVDAMKCMYEMLVKAVESGAIGLAALSDEFKQSSAW 312
QY 304 -EVKNVCIVLGGNVDLTSLNW 324
Db 313 HESSKIGIIVSGNVDLGLV-W 333

RESULT 7

US-10-425-114-49567
; Sequence 49567, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E.
; APPLICANT: Tabaska, Jack E.
; APPLICANT: Cao, Yongwei

; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 49567
; LENGTH: 379
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: 700335017_FLI.pep
US-10-425-114-49567

Query Match 42.7%; Score 743.5; DB 15; Length 379;
Best Local Similarity 45.3%; Pred. No. 7.4e-64;
Matches 146; Conservative 65; Mismatches 104; Indels 7; Gaps 4;

QY 5 YCISFADVEKAHINIQPSIHLTPVLTSILNQIAGRNLPFKCBLFOKTSFKIRGALNAI 64
Db 57 YAADIDSIREAQARIAPVHRTVMSSTSIDAMVKKLFFKCECFQKAGAFKIRGASNSI 116
QY 65 RGLIPDTPPEPKAVVTHSSGNHCOALTYAAKLEGIPAYIVPOTAPNCKKLAIAQYGAS 124
Db 117 FAL---DDEQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAPACKVENVRKYGCH 173
QY 125 IYVCDPDESREKVTQRMQETGILVHPNOEPVIAAGQGTIALEVLNQVPLVDALVVPV 184
Db 174 IIVSDASIESREYVKRQOEBTGAVLIHPNPKYTISSGGQTSVLELEVEPEIDTIIVPI 233
QY 185 GGGMVAGIATITKALPKSVKVAAPSNADDCYQSKLGELTPNLHPPTIADGVKSSI 244
Db 234 SGGGLISGVALAAKAINPSIRILAAEPKGADDSQAQKAAGKII-TLPSTNTIADGLRAFL 292
QY 245 GLNTWPIIRDVDDVFTTDEIKYATQLVWGRMKLLIETPTAGVLAALVLSQHFQTVSP- 303
Db 293 GDLTPWVRDLVDDIIVDDTAIVDAMKCMYEMLVKAVESGAIGLAALSDEFKQSSAW 352
QY 304 -EVKNVCIVLGGNVDLTSLNW 324
Db 353 HESSKIGIIVSGNVDLGLT-W 373

RESULT 8

US-10-425-114-62761
; Sequence 62761, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E.
; APPLICANT: Tabaska, Jack E.
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 62761
; LENGTH: 280
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3591-097-G1_FLI.pep
US-10-425-114-62761

Query Match 36.8%; Score 640.5; DB 15; Length 280;
Best Local Similarity 46.7%; Pred. No. 5.8e-54;
Matches 128; Conservative 55; Mismatches 84; Indels 7; Gaps 4;
QY 53 GSFKIRGALNAIRGLIPDTPPEKPAVTHSSGNHCOALTYAAKLEGIPAYIVPOTAPN 112
Db 6 GAFKIRGASNSIFAL---DDEQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAP 62
QY 113 CKKLAIAQYAGSIVYCDPDESREKVTQRMQETGILVHPNOEPVIAAGQGTIALEVLN 172
Db 63 CKVENVRKYGCHIIWSDASIESREYVKRQOEBTGAVLIHPNPKYTISSGGQTSVLELE 122
QY 173 QVPLVDALVVPVGGGMVAGIATITKALPKSVKVAAPSNADDCYQSKLGELTPNLHP 232
Db 123 QVPEIDTIIVPISSGGGLISGVALAAKAINPSIRILAAEPKGADDSQAQKAAGKII-TLPS 181
QY 233 PETIADGVKKSIGLNTWPIIRDVDDVFTTDEIKYATQLVWGRMKLLIETPTAGVLAAL 292
Db 182 TNTIADGLRAFLGDLTPWVRDLVDDIIVDDTAIVDAMKCMYEMLVKAVESGAIGLAA 241
QY 293 VLSQHFQTVSP--EVKNVCIVLGGNVDLTSLNW 324
Db 242 ALSDEFKQSSAWHESSKIGIIVSGNVDLGLT-W 274

RESULT 9

US-10-424-599-155063
; Sequence 155063, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 155063
; LENGTH: 247
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_111043C.1.pap
US-10-424-599-155063

Query Match 33.2%; Score 577; DB 15; Length 247;
Best Local Similarity 44.9%; Pred. No. 8.1e-48;
Matches 109; Conservative 58; Mismatches 70; Indels 6; Gaps 4;

QY 85 GNHGOALTAAKLEGIPAYIVPOTAPNCKKLAIOAYGASIVYCDPSDESREKVTQRIHQ 144
DB 1 GNHAAALAAKLGIFSYIVIPKNATCKIENRYGGQVWVSEASVQSGREEIANKVWQ 60

QY 145 ETEGILVHPNQEPAVIAGQGTIALVLNQLVDALVVPVGGGVMAGIATIKALKPSV 204
DB 61 ESGAFIHPYNDGRILSGQGTISLEILEQAQIDTLVVPISGGGLSGIALAASINPAI 120

QY 205 KYVAAEPSNADDCVQSKLKGELTNLHPPTIADGVKSSIGLNTWPIIRDLVDVFTVTE 264
DB 121 RIFAAEPKGAADDAQSKAAGRIT-RLPETNTIADGLRAFLGDEFTWVVRDLVBEIITVED 179

QY 265 DEIKYATQLVWGRMKLLEPTAGVALAAVLQHFQTVSP--EVKNVCIVLSGGNVDLTS 321
DB 180 SEIKAMKLCFEILKVVVEPSGAIGLAALVSDTFQK-NPAWKDCNHIGIVVSGGNVDLW 238

QY 322 LNW 324
DB 239 L-W 240

RESULT 10
US-10-767-701-43071
; Sequence 43071, Application US/10767701
; Publication No. US20040172684A1
; GENERAL INFORMATION:
; APPLICANT: Kovalic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
; FILE REFERENCE: 38-21(53535)B
; CURRENT APPLICATION NUMBER: US/10/767,701
; CURRENT FILING DATE: 2004-01-29
; NUMBER OF SEQ ID NOS: 63128
; SEQ ID NO 43071
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Sorghum bicolor
; NAME/KEY: unsure
; LOCATION: (1)..(252)
; OTHER INFORMATION: unsure at all Xaa locations
; FEATURE:
; OTHER INFORMATION: Clone ID: SORBI-28MAY03-C9309_1.pap
US-10-767-701-43071

Query Match 28.7%; Score 499.5; DB 16; Length 252;
Best Local Similarity 42.6%; Pred. No. 3.3e-40;
Matches 104; Conservative 48; Mismatches 87; Indels 5; Gaps 4;

QY 84 SGNHGOALTAAKLEGIPAYIVPOTAPNCKKLAIOAYGASIVYCDPSDESREKVTQRIHQ 143
DB 5 SGNHAAALAAKLGIPAHIVIPRNAPACKVENRYGGHIIRSDVIESRESCRVQ 64

QY 144 QETEGILVHPNQEPAVIAGQGTIALVLNQLVDALVVPVGGGVMAGIATIKALKPS 203
DB 65 EETGAULHPFNKYITISGGTISLEILEQAQIDTLVCSGGXISGVTLLAAMAINPS 124

QY 204 KYVAAEPSN-ADDCVQSKLKGELTNLHPPTIADGVKSSIGLNTWPIIRDLVDVFTVTE 262
DB 125 IRLAAEPKGAADDAQSKAAGKII-TLPSTNTIADGLRAFLGDLTPVVRDLVGGVIVV 183

QY 263 TEDEIKYATQLVWGRMKLLEPTAGVALAAVLQHFQTVSP--EVKNVCIVLSGGNVDLT 320
DB 184 DATAIVAMRVCHELLEVAVEPRGAIGLAALSDPEFKQSSAMHESKIGIIVSGGNVDLG 243

QY 321 SLNW 324

Db 244 TL-W 246

RESULT 11

US-10-156-761-10839
; Sequence 10839, Application US/10156761
; Publication No. US20030119018A1
; GENERAL INFORMATION:
; APPLICANT: OMURA, SATOSHI
; APPLICANT: IKEDA, HARUO
; APPLICANT: ISHIKAWA, JUN
; APPLICANT: HORIKAWA, HIROSHI
; APPLICANT: SHIBA, TADAYOSHI
; APPLICANT: SAKAKI, YOSHIYUKI
; APPLICANT: HATTORI, MASAHIRA
; TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
; FILE REFERENCE: 249-262
; CURRENT APPLICATION NUMBER: US/10/156,761
; CURRENT FILING DATE: 2002-05-29
; PRIOR APPLICATION NUMBER: JP 2001-204089
; PRIOR FILING DATE: 2001-05-30
; PRIOR APPLICATION NUMBER: JP 2001-272697
; PRIOR FILING DATE: 2001-08-02
; NUMBER OF SEQ ID NOS: 15109
; SEQ ID NO 10839
; LENGTH: 409
; TYPE: PRT
; ORGANISM: Streptomyces avermitilis
US-10-156-761-10839

Query Match 27.9%; Score 485.5; DB 14; Length 409;
Best Local Similarity 37.7%; Pred. No. 1.6e-38;
Matches 118; Conservative 50; Mismatches 136; Indels 9; Gaps 4;

QY 7 ISPADVEKAHINTQDSIHLPVLTSSILNQIAGRNLPFKCELQKTSFKIRGALMAIRG 66
DB 12 VTLDDVYRGAQKMLAGVARMTEGSRHLSQLVGAPEVHFVKCENLQRTSGFRLRGAYVRIAG 71

QY 67 LIPDTPPEKPKAVVTHSSGNHGOALTAAKLEGIPAYIVPOTAPNCKKLAIOAYGASIV 126
DB 72 LL---PEERAAGVVAASAGNHAQGVALLSLLGVSTVFMKAAPLPKISATREYGAERV 128

QY 127 YCDPSDESREKVTQRIHQETEGILVHPNQEPAVIAGQGTIALVLNQLVDALVVPVGG 186
DB 129 LHGTVVDETLLAAAEVAAETGAVFIHPFDHPDIIAGQGTVGLLEILEQCPEVRTIVVGG 188

QY 187 GGMVAGIATIKALKPSVKVYAAEPSNADDCVQSKLKGELTNLHPPTIADGVK-SSIG 245
DB 189 GGLAAGIATAVKALRPDVRIVGVQAAGA-AAYPPLAAGRPFVSVENPATWADGIKVRPG 247

QY 246 LNTWPIIRDLVDVFTVTEDEIKYATQLVWGRMKLLEPTAGVALAAVLQHFQTVSP 305
DB 248 DVPFRIIGDLVDVETVSEGNLSSALLCLERAKLVVEPAGASPVALLREPGAFEGP-- 305

QY 306 KNVCIVLSGGNVD 318
DB 306 --VVALSGGNVD 316

RESULT 12

US-10-413-943-33
; Sequence 33, Application US/10413943
; Publication No. US20040006784A1
; GENERAL INFORMATION:
; APPLICANT: Mourad, George S.
; TITLE OF INVENTION: Methods and Compositions for Producing Plants and Microorganisms
; TITLE OF INVENTION: that Express Feedback Insensitive Threonine Dehydratase/Deaminase
; FILE REFERENCE: PRF-07898
; CURRENT APPLICATION NUMBER: US/10/413,943
; CURRENT FILING DATE: 2003-04-15
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: PatentIn version 3.2

252 IRDLVDDVFTVTDEIKYATQLVMGRMKLLIEPTAGVALAAVLQSHFOTVSPEV---KQV 308
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
305 AQQVVDEVVLNTDIECAAVDIFEDTRSIVEPSGALSAG-MKKYISTVHPIDHTKNT 363
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
309 CI-VLSSGNVDLTSLNWVGQ 327
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
364 YVPILSGANMFDRLFVSE 383
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 14
US-10-413-943-31
; Sequence 31, Application US/10413943
; Publication No. US20040006784A1
; GENERAL INFORMATION:
; APPLICANT: Mourad, George S,
; TITLE OF INVENTION: Methods and Compositions for Producing Plants and Microorganisms
; TITLE OF INVENTION: that Express Feedback Insensitive Threonine Dehydratase/Daminases
; FILE REFERENCE: PRF-07898
; CURRENT APPLICATION NUMBER: US/10/413,943
; CURRENT FILING DATE: 2003-04-15
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 31
; LENGTH: 514
; TYPE: PRT
; ORGANISM: Salmonella typhimurium
; US-10-413-943-31

Query Match 22.1%; Score 384; DB 15; Length 514;
Best Local Similarity 32.3%; Pred. No. 2e-28;
Matches 102; Conservative 69; Mismatches 127; Indels 18; Gaps 8;

QY 19 IQDSIHLTPVLTSIIINQIAGRNLFFKELFOKTSFKIRGALNAIRGLIPDTPEPKPA 78
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 25 VVEAAQVTPLOQWEXKLSSRLNVILVKREDRQPVHSFKLRGAYAMWAGL---TESQKAHG 81
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 79 VVTHSGNHGOALTVAAKLEGIPAYTVVPQTAPNCKKLAIQAYGASIVVCPS-DESREK 137
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 82 VITAGAGNHAQGVARSARLGKVSLLVMPKATADIKVDVRGFGGEVLLHGANFDEAKAK 141
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 138 VTQRIMQETEGILVHPNOBPAVIAGGTIALEVNQVPLVDALVPVGGGGMVAGIATI 197
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 142 ATE-LAQOQGFTVWPFPDPHMVIAAGGTIALLELLOQSDHLDRVFVPVGGGLAAGVAVLI 200
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 198 KALKPSKVYAAEPSNADD--CVQSCLKGELPNLPHPETIADGVK-SSIGLNTWPIIRD 254
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 201 KQLMPOIKVIAVE---AESACLKAAALEAGHPVDLPRVGLFAGVAVKRGIDETFLCOE 257
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 255 LVDDVFTVTDEIKYATQLVMGRMKLLIIEPTAGVALAAV---LSQHFOTVSPEVKNVICV 311
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 258 YLDDIITVDSDAICAMKDLFEDVRAVEPSGALAGMKKYIAQH---NIRGERLAHV 313
.: :| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
QY 312 LSGGNVDLTSLNWVGQ 327
|| || || | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
DB 314 LSGANVNFHGLRYVSE 329
|| || || | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

RESULT 15
US-10-424-599-266101
; Sequence 266101, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684

```
; SEQ ID NO 266101
; LENGTH: 602
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_8230C.1.pep
US-10-424-599-266101

Query Match      21.8%; Score 380; DB 15; Length 602;
Best Local Similarity 31.8%; Pred. No. 6.4e-28;
Matches 103; Conservative 65; Mismatches 118; Indels 38; Gaps 11;

QY 17 INTQDSHLTPVLTSSILNQIAGRNLPFKCELFQKTSFKIRGALNAIRGLIPTPEKP 76
Db 117 VAIESPLQLAPKUSARL-----GVKWLKREDLQPVFSFKLRGAYNNMAKLPTELLE--- 168

QY 77 KAVVTHSSGNHGQALTYAAKLEGIPAYIVVPQTAPNCKLAIQAYGASIVYC-DPSDESR 135
Db 169 KGVICSSAGNHAQGVALAARLNCSAVIAMPVTTPEIKWKSVEALGNTVVLVGDSDYDEAQ 228

QY 136 EKVTRIMQTEGILVHPNOEPVIAQGQTIALEVLNQV--PLVDALWVPVGGGMVAGI 193
Db 229 AVAKKRGVEGR-TFVPPFDHPDVMGQGTIGMEIVRQMGPFI-AIFVFPVGGGLIAGI 286

QY 194 AITIKALKPSVKVYAAEPSNADDCYQSKLKGELTPNLHPPETI-----ADGVK-SSI 244
Db 287 AAYVKRVKPEVKIFGVEPTDAN-----AMALSLHHDQRVILDQVGGFADGVAVKEV 337

QY 245 GLNTWPIIRDLDVDDFTVTDEIKYATQLVGRMKLLIEPTAGVALA---AVLSQHFQTV 301
Db 338 GEETFRICKELIDGVVLVSRSDSICASIKDMFEKRNILEPAGALALAGAEAYCKHH---- 393

QY 302 SPEVKNVCIVLGGNVDLTSLNWV 325
Db 394 GVQGDIVWITSGANMFDKLRVV 417
```

Search completed: April 22, 2005, 16:42:20
Job time : 89.3697 secs

THIS PAGE BLANK (USP10)

GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM protein - protein search, using sw model

Run on: April 22, 2005, 16:19:29 ; Search time 30.0442 Seconds
(without alignments)
844.779 Million cell updates/sec

Title: US-09-889-609B-10

Perfect score: 1735

Sequence: 1 MCAQYCISPADVEKAHINIR.....SSITWVKQAEKPASVSV 340

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

- 1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep.*
- 2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep.*
- 3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep.*
- 4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep.*
- 5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep.*
- 6: /cgn2_6/ptodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1735	100.0	340	4	US-09-789-300A-2
2	601	34.6	332	4	US-09-543-681A-4645
3	578	33.3	328	4	US-09-328-352-4536
4	538	31.0	374	4	US-09-252-991A-31294
5	457	26.3	524	4	US-09-252-991A-27783
6	445	25.6	405	4	US-09-302-540-12639
7	443.5	25.6	411	4	US-09-328-352-5207
8	442	25.5	334	4	US-09-489-039A-14107
9	403	23.2	677	4	US-09-252-991A-22442
10	393	22.7	525	4	US-09-543-681A-4364
11	375	21.6	507	4	US-09-424-978B-34
12	369	21.3	521	4	US-09-489-039A-8050
13	367	21.2	424	3	US-09-134-001C-3876
14	367	21.2	424	4	US-09-710-279-1046
15	335	20.5	518	4	US-09-420-236-3648
16	348.5	20.1	441	1	US-08-403-866-10
17	344.5	19.9	520	4	US-09-328-352-7451
18	336	19.4	421	4	US-09-107-433-2928
19	330	19.0	416	4	US-09-583-110-3878
20	310.5	17.9	436	3	US-08-669-378-2
21	310.5	17.9	436	3	US-08-669-378-12
22	309.5	17.8	436	3	US-08-669-378-4
23	309.5	17.8	436	3	US-08-669-378-6
24	309.5	17.8	436	3	US-08-669-378-10
25	307.5	17.7	436	3	US-08-669-378-8
26	283.5	16.3	378	4	US-09-789-300A-4
27	277.5	16.0	329	4	US-09-843-297-2

28	274.5	15.8	347	4	US-09-949-016-10697	Sequence 10697, A
29	265.5	15.3	328	4	US-09-949-016-6763	Sequence 6763, Ap
30	259.5	15.0	325	3	US-09-088-435-1	Sequence 1, Appli
31	256	14.8	331	4	US-09-252-991A-29393	Sequence 29393, A
32	242.5	14.0	373	4	US-09-248-796A-18227	Sequence 18227, A
33	241.5	13.9	367	3	US-09-134-001C-4168	Sequence 4168, Ap
34	237	13.7	392	4	US-09-424-978B-29	Sequence 29, Appl
35	211	12.2	387	4	US-09-248-796A-18228	Sequence 18228, A
36	196.5	11.3	308	4	US-09-583-110-4369	Sequence 4369, Ap
37	196.5	11.3	317	4	US-09-107-433-4532	Sequence 4532, Ap
38	195	11.2	303	4	US-09-107-532A-3925	Sequence 3925, Ap
39	193.5	11.2	398	4	US-09-248-796A-17694	Sequence 17694, A
40	191	11.0	225	4	US-09-134-000C-3983	Sequence 3983, Ap
41	190.5	11.0	311	4	US-09-962-357-5	Sequence 5, Appli
42	187	10.8	378	4	US-08-311-731A-161	Sequence 161, App
43	187	10.8	550	4	US-09-538-092-1075	Sequence 1075, Ap
44	187	10.8	551	1	US-08-120-960-2	Sequence 2, Appli
45	187	10.8	551	3	US-09-347-878-9	Sequence 9, Appli

ALIGNMENTS

RESULT 1

US-09-789-300A-2

; Sequence 2, Application US/09789300A

; Patent No. 6458576

; GENERAL INFORMATION:

; APPLICANT: Meyers, Rachel

; APPLICANT: Rudolph-Owen, Laura A.

; TITLE OF INVENTION: 2406, A No. 6458576el Human Pyridoxal-Phosphate

; FILE REFERENCE: 35800/208926

; CURRENT APPLICATION NUMBER: US/09/789,300A

; CURRENT FILING DATE: 2001-02-20

; PRIOR APPLICATION NUMBER: US 60/183,208

; PRIOR FILING DATE: 2000-02-17

; NUMBER OF SEQ ID NOS: 4

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 2

; LENGTH: 340

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-789-300A-2

Query Match 100.0%; Score 1735; DB 4; Length 340;

Best Local Similarity 100.0%; Pred. No. 4.5e-189;

Matches 340; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCAQYCISPADVEKAHINIRDSIHLPVLTSSILNLTGRNLPFKCFLFOKTSFKIRGA 60

Db 1 MCAQYCISPADVEKAHINIRDSIHLPVLTSSILNLTGRNLPFKCFLFOKTSFKIRGA 60

QY 61 LNAVSLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAVIVVPTAPDCKKLAIOA 120

Db 61 LNAVSLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAVIVVPTAPDCKKLAIOA 120

QY 121 YGASIVYCEPSDESRENKRVTEETEGIMVHPNQSPAVIAGQGTIALEVLNQLVDAL 180

Db 121 YGASIVYCEPSDESRENKRVTEETEGIMVHPNQSPAVIAGQGTIALEVLNQLVDAL 180

QY 181 VYPVGGGGLAGIAITVKALKPSVKVYAAEPNADDCYOSKLGKLMPLNYPETIADGV 240

Db 181 VYPVGGGGLAGIAITVKALKPSVKVYAAEPNADDCYOSKLGKLMPLNYPETIADGV 240

QY 241 KSGIGLNTWPIIRDLVDDIFTVTDEIKCATQLVWERMKLLIBPTAGVGVAAVLSQHFQT 300

Db 241 KSGIGLNTWPIIRDLVDDIFTVTDEIKCATQLVWERMKLLIBPTAGVGVAAVLSQHFQT 300

QY 301 VSPVKNICIVLSGGNVDLTSSITWVKQAEKPASVSV 340

Db 301 VSPVKNICIVLSGGNVDLTSSITWVKQAEKPASVSV 340

```
RESULT 2
US-09-543-681A-4645
; Sequence 4645, Application US/09543681A
; Patent No. 6605709
; GENERAL INFORMATION:
; APPLICANT: GARY BRETON
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
; FILE OF INVENTION: DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 2709.1002-001
; CURRENT APPLICATION NUMBER: US/09/543.681A
; PRIOR FILING DATE: 2000-04-05
; PRIOR APPLICATION NUMBER: US 60/128,706
; PRIOR FILING DATE: 1999-04-09
; NUMBER OF SEQ ID NOS: 8344
; SEQ ID NO 4645
; LENGTH: 332
; TYPE: PRT
; ORGANISM: Proteus mirabilis
US-09-543-681A-4645

Query Match      34.6%; Score 601; DB 4; Length 332;
Best Local Similarity 40.6%; Pred. No. 1.3e-59;
Matches 127; Conservative 69; Mismatches 109; Indels 8; Gaps 5;

QY      8 SFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 67
Db      17 TYDQVVEAHOIRLPYLNTKPTILTSRTINELTGAQFYKFCENFORIGAFKFRGANNALSQF 76
QY      68 VPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPQTAPDCCKKLAIOYASIVY 127
Db      77 TD---EQRKNGVITSSNGHQAIALSALKLIGIPATIIMPDBATKAKQATKGYGGRVIL 133
QY      128 CEPDSERENVAKRVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGG 187
Db      134 YNRYTQDREEIGKLAQEGELTLPYDHPVHVIAGQGTAAKELFEVGEGLDMLFVPLGG 193
QY      188 GMLAGIAITVALKSPVKVYAAEPSNADDCYOSKLGKMLPNLYPPETIADGVKSS-IGL 246
Db      194 GLLSGLSLSTKALSPHCRIFGVEPLAGNDGQOSLRKGEII-YIDTPKTIADGAQTQHLGD 252
QY      247 NTWPIIRDLVDDIFTVTEDEIKCATQLVWERMKLLIEPTAGVGVAAVLSQHFQTVSPVK 306
Db      253 YTFEIRNNVDILTATDEELISAMQFYAQRMKLIVFTGCLSLAA--ARQFGD-KLKGK 309
QY      307 NICIVLSGGNVDL 319
Db      310 KIGIIISGGNVDI 322

RESULT 3
US-09-328-352-4536
; Sequence 4536, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 4536
; LENGTH: 328
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-4536

Query Match      33.3%; Score 578; DB 4; Length 328;
Best Local Similarity 41.5%; Pred. No. 5.4e-57;
Matches 131; Conservative 62; Mismatches 111; Indels 12; Gaps 5;

QY      8 SFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 67
```

```
Db      14 NYEDVAAAAERIKDFINKTPTVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 70
QY      68 VPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPQTAPDCCKKLAIOYASIVY 127
Db      71 LQFNETOKKAGVAFSSNGHQAIALSALKLIGIPATIIMPDBATKAKQATKGYGGRVIL 130
QY      128 CEPDSERENVAKRVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGG 187
Db      131 FDRYTEDREKIGKIEAKNGLTILPSYDHPVHVIAGQGTAAKELFEVGEGLDMLFVPLGG 190
QY      188 GMLAGIAITVALKSPVKVYAAEPSNADDCYOSKLGKMLPNLYPPETIADGVKSS-IGL 246
Db      191 GLLAGSALSALQSPKCKIYGVPEPALNDGQMSFRKGEIV-HIDTPTIADGAQTQYLGK 249
QY      247 NTWPIIRDLVDDIFTVTEDEIKCATQLVWERMKLLIEPTAGVGVAAVLSQHFQTVSPVK 305
Db      250 LTFPIIQOKVDDILTATDEELINAMKFFAERMOMVVEPTGCLGFAAAA-----RNLKDELK 304
QY      306 -KNICIVLSGGNVDLT 320
Db      305 GKRIIGIISGGNVDIS 320

RESULT 4
US-09-252-991A-31294
; Sequence 31294, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 31294
; LENGTH: 374
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-31294

Query Match      31.0%; Score 538; DB 4; Length 374;
Best Local Similarity 37.7%; Pred. No. 2.5e-52;
Matches 118; Conservative 67; Mismatches 120; Indels 8; Gaps 4;

QY      8 SFADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAVRSL 67
Db      60 TYDDVIAAAARIAGHANRTPVMSRTLDEELGAEVFFKCNLQRMGAFKFRGAPNALSFR 119
QY      68 VPDALERKPKAVVTHSSNGHQALTYAAKLEGIPAYIVVPQTAPDCCKKLAIOYASIVY 127
Db      120 ---SAEQRAAGVAFSSNGHQAIALSALKLIGIPATIIMPDBATKAKQATKGYGGOVL 176
QY      128 CEPDSERENVAKRVTEETEGIMVHPNQEPAVIAGQGTIALEVLNQVPLVDALVVPVGG 187
Db      177 YDRYTEDREQIGRLAQRHGLTLPYDHPDVLGAGQGTAAKELFEVGEGLDMLFVPLGG 236
QY      188 GMLAGIAITVALKSPVKVYAAEPSNADDCYOSKLGKMLPNLYPPETIADGVKSS-IGL 246
Db      237 GLLSGCALAIRALAPACRIYGVPEAGNDQQRSLRSGAIV-HIDTPTIADGAQTQHLGN 295
QY      247 NTWPIIRDLVDDIFTVTEDEIKCATQLVWERMKLLIEPTAGVGVAAVLSQHFQTVSPVK 306
Db      296 LTFPLQRNVDDILTATDEELVDMGRFLAARMKLLVEPTGCLGLAARQKDEL---RGK 352
QY      307 NICIVLSGGNVDL 319
Db      353 RVGILLISGGNIDL 365
```


RESULT 5
US-09-252-991A-27783
; Sequence 27783, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 27783
; LENGTH: 524
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
; NAME/KEY: UNSURE
; LOCATION: (108)
; OTHER INFORMATION: Identity of amino acid at the above locations are unknown.
US-09-252-991A-27783

Query Match 26.3%; Score 457; DB 4; Length 524;
Best Local Similarity 35.2%; Pred. No. 7.8e-43;
Matches 116; Conservative 63; Mismatches 127; Indels 24; Gaps 8;
QY 26 TPVLTSSILNQLTGRNLFKCELPQKTSFKIRGALNAVSLVPDALERKPKAVVTHSSG 85
DB 41 TPLQPARQLSERLGNQVLLKREDLPVFSFKIRGAYKNVAQLTE---EEKARGVIAASAG 97
QY 86 NHGQALTYAAKLEGIPAYIVVPTAPDCKKLAQAYCA-SIVYCEPDESRENVAKVTE 144
DB 98 NHAQGLAAXRQIRAVIVPKTTPKIKVQAVRAHGAQVLAHGDAPPEALAHKLIV-D 156
QY 145 ETEGIMVHPNQEPVIAAGQGTIALEVLNOVP-LVDALVVPVGGGMLAGTATVTKALKPS 203
DB 157 EKGVTFFVHPVDDPTIAGQGTVAEMILRQPGRLDAIFVPVGGGLVAGVAAVVKYLRPE 216
QY 204 VKVYAAEPSNADDCYQSKLKGKLPNLYPPETIADGVK-SSIGLNTWPIIRDLVDDIFTV 262
DB 217 IKVIGVEPDES-NCLQAAAGERVVLGOVGLFADGVAVAGIQTHTFDICKDHVEVITV 275
QY 263 TEDEIKCATQLWERMKLLIEPTAGVGAVALSOHFOFOTVSPVKNICIVLGGNVDL--- 319
DB 276 STDEICAAIKDIYDDTTSITEPAGALAVAGI-KKYVERERAEGQTLVAIDSGANVPDRL 334
QY 320 -----TSSITWVKQAEPPASVQS 337
DB 335 RHVAERAEGERREAIIVTIPERPGSFKA 364

RESULT 6
US-09-902-540-12639
; Sequence 12639, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825

; SEQ ID NO 12639
; LENGTH: 405
; TYPE: PRT
; ORGANISM: Myxococcus xanthus
US-09-902-540-12639
Query Match 25.6%; Score 445; DB 4; Length 405;
Best Local Similarity 33.9%; Pred. No. 1.2e-41;
Matches 107; Conservative 66; Mismatches 135; Indels 8; Gaps 6;
QY 7 ISFADVEKAHINIRDSIHLTPVLTSSILNQLTG-RNLFKCELPQKTSFKIRGALNAVR 65
DB 2 VTLEDIQARERLRSAIRPTPCQSDYYTERTTECAAVFFKLENLQRTGAFKRGALNKL 61
QY 66 SLVPDALERKPKAVVTHSSGNHGOALTYAAKLEGIPAYIVVPTAPDCK-KLAIQAYGAS 124
DB 62 TLTED-ERR-RGVIAASAGNHAQGVAVHAQRTGVTATIVMPKSTPNVKVQVRVREYGARVILHGQ 118
QY 125 IYVCEPDESRENVAKVTEETEGIMVHPNQEPVIAAGQGTIALEVLNOVPVLDALVVPV 184
DB 119 VVLKGTNYDEAYABALRIQAEKDRVFIHPFNDAHVIAAGQGTIGLELLEQCPDLEVLVPI 178
QY 185 GGGMLAGIAITVTKALKPSVKVYAAEPSNADDCYQSKLKGKLPNLYPPETIADGVK-SS 243
DB 179 GGGGLISGIAKALKETPRDIRVVGVOAETIASMKASVEAGERVLLAAGTTIADGIAVKR 238
QY 244 IGLNTWPIIRDLVDDIFTVTEDEIKCATQLWERMKLLIEPTAGVGAVALSOHFOFOTVSP 303
DB 239 VGLTTPMVQKYVDEVAVVDEEBIAAAILTLLEQKSVVEGAGVGLAALLSG--DVPAA 296
QY 304 EVKNICIVLGGNVDL 319
DB 297 RGRRTAILSGGNIDM 312

RESULT 7
US-09-328-352-5207
; Sequence 5207, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: GTC99-03PA
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 5207
; LENGTH: 411
; TYPE: PRT
; ORGANISM: Acinetobacter baumannii
US-09-328-352-5207
Query Match 25.6%; Score 443.5; DB 4; Length 411;
Best Local Similarity 34.5%; Pred. No. 1.8e-41;
Matches 112; Conservative 61; Mismatches 111; Indels 41; Gaps 9;
QY 11 DVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELPQKTSFKIRGALNAVRLVDP 70
DB 15 DIHAAERLDGLVVKTPFPVSEITISKTLGAKMWLKPENLQFTASFKERGALNKL 71
QY 71 ALERKPKAVVTHSSGNHGOALTYAAKLEGIPAYIVVPTAPDCKKLAQAYGASIV---- 126
DB 72 SEQEKQHGVIASAGNHAQGVAVHAQRTGVTATIVMPKSTPNVKVQVRVREYGARVILHGQ 131
QY 127 -YCEPDESRENVAKVTEETEGIMVHPNQEPVIAAGQGTIALEVLNOVPVLDALVVPV 185
DB 132 DFSEAAAEH-----RVAQESLTIHPFDDBAIIAGQGTIALEMLEAVPDLDLIVVPIG 186
QY 186 GGGMLAGIAITVTKALKPSVKVYAAE-----PSNADDCYQSKLKGKLPN-----LYPPETIA 237
DB 187 GGGGLISGIAIAKTINPKIKIIGVQSVVYPSMA-----KLLCNQYQLAVSMGSTVA 236

Db 189 GGGGLAGAVLAKQLMPETIKIGVEREDA-ACLKAALEAGHPVELPRVGLFAGVAVKR 247
QY 244 IGLNTWPIIRDLVDITFTDEIKCATQVLWERMKLLIETPTAGVGVAAVLSQHFQTVSP 303
Db 248 IGDTEFLCKQYVDDVTITVDSDAICAAVKDLFEDVRAIAEFGALALAG-LKKYVEEHQI 306
QY 304 EVKNICIVLSGGND 318
Db 307 KGERLAHVLSGANNV 321

RESULT 11

US-09-424-978B-34
; Sequence 34, Application US/09424978B
; Patent No. 6664445
; GENERAL INFORMATION:
; APPLICANT: Falco, Saverio Carl
; APPLICANT: Allen, Stephen M.
; APPLICANT: Rafalski, J. Antoni
; APPLICANT: Hitz, William D.
; APPLICANT: Kinney, Anthony J.
; APPLICANT: Abell, Lynne N.
; APPLICANT: Thorpe, Catherine J.
; TITLE OF INVENTION: Plant Amino Acid Biosynthetic Enzymes
; FILE REFERENCE: BB-1087
; CURRENT APPLICATION NUMBER: US/09/424,978B
; CURRENT FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: US 60/048,771
; PRIOR FILING DATE: 1997-06-06
; NUMBER OF SEQ ID NOS: 43
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 34
; LENGTH: 507
; TYPE: PRT
; ORGANISM: Burkholderia capacia
US-09-424-978B-34

Query Match 21.6%; Score 375; DB 4; Length 507;
Best Local Similarity 33.3%; Pred. No. 1.7e-33;
Matches 105; Conservative 59; Mismatches 125; Indels 26; Gaps 9;
QY 24 HLPVLTSSILNQL-----TGRNL-----FFKCELFOKTSFKIRGALNAVRSVLP 69
Db 6 YLKILLTARYDVAFETELEPAENLSARLRNPVYLKREDNQPVFSFKLRGAYNMMAHIFA 65
QY 70 DALERPKAVVTHSSGNHGOALTYAAKLEGIPAVIVPOTAPDCCKLAIOAYGASIVYCE 129
Db 66 DALAR---GVITASAGNHAQVAFSAARMGVKAVIVVPVTPQVKDVAHAGGPGVEVI 122
QY 130 PSDESRENV---AKRVTEETEGIMVHPNOBPAVIAGOGTTIALEVL---NOVPLVDALVVPV 184
Db 123 QAGESVSDAYAHALKVQEEGLTFVHPFDPPYVIAQGTIAMEILRHQGP-IHAFVPI 181
QY 185 GGGGLAGIAITVALKPSVKVVAEAPSNDCCYQSKLKGKLMNLYPPETIADGVK-SS 243
Db 182 GGGGLAAGVAAVYKAVRPEIKVIGVQAEDSCAMAQSLQAGKRV-ELAEVGLFADGTAVKL 240
QY 244 IGLNTWPIIRDLVDITFTDEIKCATQVLWERMKLLIETPTAGVGVAAVLSQHFQTVSP 303
Db 241 VGBETFLCKEYLDGVVVTDTDALCAAIKDVFDQTRSVLEPFGALAVAGA-KLYAEREGI 299
QY 304 EVKNICIVLSGGND 318
Db 300 ENQTLVAVTSGANNV 314

RESULT 12

US-09-489-039A-8050
; Sequence 8050, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al

; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 8050
; LENGTH: 521
; TYPE: PRT
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-8050

Query Match 21.3%; Score 369; DB 4; Length 521;
Best Local Similarity 31.7%; Pred. No. 8.6e-33;
Matches 97; Conservative 64; Mismatches 129; Indels 16; Gaps 6;
QY 19 IRDSIHLTPVLTSSILNQLTGRNLFKCELFOKTSFKIRGALNAVRSVLPDALERKPKA 78
Db 32 VYEAQKTEFLQKMDKLSRLDNVILVKREDQPVHFSFKLRGAYAMMSSL---TAEQKSHG 88
QY 79 VVTHSSGNHGOALTYAAKLEGIPAVIVPOTAPDCCKLAIOAYGASIVYCEPSDESRENV 138
Db 89 VITASAGNHAQVAFSAARLGVKALLVMPVATADIKVDVARGGEGVLLHGANFDEAKAR 148
QY 139 AKRVTEETEGIMVHPNOBPAVIAGOGTTIALEVLNOVPLVDALVVPVGGGGLAGIAITVK 198
Db 149 AIELAQOQGTFTVPPFDHPMVIAGQGTALALELQDAHIDRVFVPGVGGGLAAGVAVLIK 208
QY 199 ALKPSVKVVAEAPSNDCCYQSKLKGKLMNLYPPETIADGVK-SSIGLNTWPIIRDL 255
Db 209 QLMPOIKVIAVE---AEDSACLKAALDAGHPVDLPRVGLFAEGVAVKRIQDETFLRCQY 265
QY 256 VDDIFTVTEDEIKCATQVLWERMKLLIETPTAGVGVAAV---LSCHFQTVSPVKNICIVL 312
Db 266 LDDITVDSDAICAAWKDLFEDVRAVEFSGALALAGMKKYIAQH-----NIRGERLAHIL 321
QY 313 SGNVD 318
Db 322 SGANNV 327

RESULT 13

US-09-134-001C-3876
; Sequence 3876, Application US/09134001C
; Patent No. 6380370
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/134,001C
; CURRENT FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5674
; SEQ ID NO 3876
; LENGTH: 424
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-09-134-001C-3876

Query Match 21.2%; Score 367; DB 3; Length 424;
Best Local Similarity 31.1%; Pred. No. 1e-32;
Matches 100; Conservative 64; Mismatches 142; Indels 16; Gaps 8;
QY 7 ISFADVEKAHINIROSIHLTPVLTSSILNQLTGRNLFKCELFOKTSFKIRGALNAVRS 66
Db 9 VSTKDIDEAYLRKLNIVKETPLQFDHYLSQKNCYNILKREDLQWRSFKLRGAYNAISV 68

RESULT 4

US-10-240-466-2
; Sequence 2, Application US/10240466
; Publication No. US20030175941A1
; GENERAL INFORMATION:
; APPLICANT: Ramakrishnan, Shyam
; TITLE OF INVENTION: Regulation of Human Serine Racemase Enzyme
; FILE REFERENCE: LIO115-US
; CURRENT APPLICATION NUMBER: US/10/240,466
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: PCT/EP01/03668
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: US 60/193,748
; PRIOR FILING DATE: 2000-03-31
; PRIOR APPLICATION NUMBER: US 60/194,249
; PRIOR FILING DATE: 2000-04-03
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent in version 3.0
; SEQ ID NO 2
; LENGTH: 340
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-240-466-2

Query Match 99.8%; Score 1731; DB 14; Length 340;
Best Local Similarity 99.7%; Pred. No. 6e-162;
Matches 339; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCAQYICISPADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGA 60
DB 1 MCAQYICISPADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGA 60
QY 61 LNAVRLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPDCCKLAIQA 120
DB 61 LNAVRLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPDCCKLAIQA 120
QY 121 YGASIVYCEPSDESRENKRVTEETEGIMVHPNQEPVIAAGQGTIALEVLNQVPLVDAL 180
DB 121 YGASIVYCEPSDESRENKRVTEETEGIMVHPNQEPVIAAGQGTIALEVLNQVPLVDAL 180
QY 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYOSKLGKMLPYPETIADGV 240
DB 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYOSKLGKMLPYPETIADGV 240
QY 241 KSSIGLNTWPIRLDLDVDDIFTVTEDEIKCATQLVWERMKLLIETPTAGVGVAAVLISOHFT 300
DB 241 KSSIGLNTWPIRLDLDVDDIFTVTEDEIKCATQLVWERMKLLIETPTAGVGVAAVLISOHFT 300
QY 301 VSPEVKNICIVLGGNVDLTSSITWVKQAEPPASYSQSV 340
DB 301 VSPEVKNICIVLGGNVDLTSSITWVKQAEPPASYSQSV 340

RESULT 5

US-10-264-237-2089
; Sequence 2089, Application US/10264237
; Publication No. US20040009491A1
; GENERAL INFORMATION:
; APPLICANT: Birse et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
; FILE REFERENCE: PA131P1
; CURRENT APPLICATION NUMBER: US/10/264,237
; CURRENT FILING DATE: 2002-10-04
; PRIOR APPLICATION NUMBER: PCT/US01/16450
; PRIOR FILING DATE: 2001-05-18
; PRIOR APPLICATION NUMBER: US 60/205,515
; PRIOR FILING DATE: 2000-05-19
; NUMBER OF SEQ ID NOS: 2876
; SOFTWARE: Patent in Ver. 3.1
; SEQ ID NO 288
; LENGTH: 229

; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (209)
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (210)
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids
; FEATURE:
; NAME/KEY: MISC FEATURE
; LOCATION: (224)
; OTHER INFORMATION: Xaa equals any of the twenty naturally occurring L-amino acids
US-10-264-237-2089

Query Match 61.2%; Score 1062.5; DB 15; Length 228;

Best Local Similarity 93.4%; Pred. No. 3.3e-96;
Matches 213; Conservative 2; Mismatches 12; Indels 1; Gaps 1;

QY 1 MCAQYICISPADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGA 60
DB 1 MCAQYICISPADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGA 60
QY 61 LNAVRLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPDCCKLAIQA 120
DB 61 LNAVRLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPDCCKLAIQA 120
QY 121 YGASIVYCEPSDESRENKRVTEETEGIMVHPNQEPVIAAGQGTIALEVLNQVPLVDAL 180
DB 121 YGASIVYCEPSDESRENKRVTEETEGIMVHPNQEPVIAAGQGTIALEVLNQVPLVDAL 180
QY 181 VVPVGGGMLAGIAITVKALKPSVKVYAAEPSNADDCYOSKLGKMLP 228
DB 181 VVPVGGGMLAGIAITVKALKPSVKVYAXXP-QMQMTVPVQAEGLMP 227

RESULT 6

US-10-437-963-106995
; Sequence 106995, Application US/10437963
; Publication No. US20040123343A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa, Thomas J.
; APPLICANT: Kovacic, David K.
; APPLICANT: Zhou, Yihua
; APPLICANT: Cao, Yongwei
; APPLICANT: Wu, Wei
; APPLICANT: Boukharov, Andrey A.
; APPLICANT: Barbazuk, Brad
; APPLICANT: Li, Ping
; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
; FILE REFERENCE: 38-21(53221)B
; CURRENT APPLICATION NUMBER: US/10/437,963
; CURRENT FILING DATE: 2003-05-14
; NUMBER OF SEQ ID NOS: 204966
; SEQ ID NO 106995
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Oryza sativa
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT4530_1138C.1.pep
US-10-437-963-106995

Query Match 44.6%; Score 774; DB 16; Length 339;

Best Local Similarity 47.1%; Pred. No. 1.8e-67;
Matches 152; Conservative 64; Mismatches 99; Indels 8; Gaps 4;

QY 5 YCISPADVEKAHINIRDSIHLTPVLTSSILNQLTGRNLFKCELFQKTSFKIRGALNAV 64
DB 17 YAAIHISIREAQARIAPYVHKTPVLSSTSIDAIVGKQLFFKCECFKAGAFKIRGASNSI 76
QY 65 RSLVDPALERKPKAVVTHSSGNHGQALTYAAKLEGIPAYIVVPTAPDCCKLAIQAYGAS 124

```
Db 77 FALDDDD---EASKGVVTHSSGNHAAVALAAKLGIPAYIVIPRNAPACKVDNVKRYGCH 133
QY 125 IYCEPSPDESRENKAVRTEETEGIMVHPNOEPVIAAGQGTIALEVLNOVPLVDLVVPV 184
Db 134 IWSVDVSIRESKAVRQVETGAILVHPFNNTTISGGQTSVLELEVPDIIVPI 193
QY 185 GGGGMLAGIAITVKALPKSVKVAAPSNADDCVQSKLKGKLMPLNYPETIADGVKSSI 244
Db 194 SGGGLISGVALAAKAINPISIRILAAEPKGDADSQAQKAAGKII-TLPSTNTIADGLRAFL 252
QY 245 GLNTWPIIRDLDVDDIFVTTEDEIKCATQLVWERMKLLIETPTAGVGAVALVSOHQFTVSP- 303
Db 253 GDLTPVVRDLVDVDDIIVDDNAIVDMKMCYEMKLVAVEPSPAIGLAALSDEFKQSSAW 312
QY 304 -EVKNICIVLSGGNVLDTSITW 325
Db 313 HESSKIGIIVSGGNVDL--GVILW 333
```

RESULT 7

```
US-10-425-114-49567
; Sequence 49567, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 49567
; LENGTH: 379
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: 700335017_FLI.pep
US-10-425-114-49567
```

```
Query Match 43.5%; Score 755; DB 15; Length 379;
Best Local Similarity 46.1%; Pred. No. 1.6e-65;
Matches 146; Conservative 66; Mismatches 99; Indels 6; Gaps 3;
```

```
QY 5 YCISFADVEKAHINIRDSIHLTPVLTSILNLTGRNLFKCELFOKTSFKIRGALNAV 64
Db 57 YAADTDSIREAQARIAPYVHRTVMSSTSIDAMVGKLFKCECFKAGAFKIRGASNSI 116
QY 65 RSLVPDALERKPKAVVTHSSGNHQAALTYAAKLEGIPAYIVIPQTPADCKKLAIAQVGAS 124
Db 117 FALDD---EQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAPACKVDNVKRYGCH 173
QY 125 IYCEPSPDESRENKAVRTEETEGIMVHPNOEPVIAAGQGTIALEVLNOVPLVDLVVPV 184
Db 174 IWSVDVSIRESKAVRQVETGAILVHPFNNTTISGGQTSVLELEVPDIIVPI 233
QY 185 GGGGMLAGIAITVKALPKSVKVAAPSNADDCVQSKLKGKLMPLNYPETIADGVKSSI 244
Db 234 SGGGLISGVALAAKAINPISIRILAAEPKGDADSQAQKAAGKII-TLPSTNTIADGLRAFL 292
QY 245 GLNTWPIIRDLDVDDIFVTTEDEIKCATQLVWERMKLLIETPTAGVGAVALVSOHQFTVSP- 303
Db 293 GDLTPVVRDLVDVDDIIVDDNAIVDMKMCYEMKLVAVEPSPAIGLAALSDEFKQSSAW 352
QY 304 -EVKNICIVLSGGNVLDL 319
Db 353 HESSKIGIIVSGGNVDL 369
```

RESULT 8

```
US-10-425-114-62761
; Sequence 62761, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 62761
; LENGTH: 280
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB3591-097-G1_FLI.pep
US-10-425-114-62761
```

```
Query Match 37.5%; Score 651; DB 15; Length 280;
Best Local Similarity 47.6%; Pred. No. 1.9e-55;
Matches 128; Conservative 56; Mismatches 79; Indels 6; Gaps 3;
```

```
QY 53 GSFKIRGALNAVRSIVPDALERKPKAVVTHSSGNHQAALTYAAKLGIPAYIVIPQTPAD 112
Db 6 GAFKIRGASNSIFALDD---EQVSKGVVTHSSGNHAAVALAAKLGIPAHIVIPRNAPA 62
QY 113 CKKLAIAQYAGASIVYCEPSPDESRENKAVRTEETEGIMVHPNOEPVIAAGQGTIALEVLN 172
Db 63 CKVENVKRYGGHIIWSDASIESREYCKRQVETGAVLIHPFNFSKYTISGGQTSVLELE 122
QY 173 QVPLVDALVVPVGGGMLAGIAITVKALPKSVKVAAPSNADDCVQSKLKGKLMPLNYP 232
Db 123 QVPEIDTIIVPISGGGLISGVALAAKAINPISIRILAAEPKGDADSQAQKAAGKII-TLPS 181
QY 233 PETIADGVKSSIGLNTWPIIRDLDVDDIFVTTEDEIKCATQLVWERMKLLIETPTAGVGA 292
Db 182 TNTIADGLRAFLGDLTPVVRDLVDVDDIIVDDNAIVDMKMCYEMKLVAVEPSPAIGLAA 241
QY 293 VLSQHFQTVSP--EVKNICIVLSGGNVLDL 319
Db 242 ALSDEFKQSSAWHESSKIGIIVSGGNVDL 270
```

RESULT 9

```
US-10-424-599-155063
; Sequence 155063, Application US/10424599
; Publication No. US20040031072A1
; GENERAL INFORMATION:
; APPLICANT: La Rosa Thomas J
; APPLICANT: Kovalic David K
; APPLICANT: Zhou Yihua
; APPLICANT: Cao Yongwei
; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with
; FILE REFERENCE: 38-21(53223)B
; CURRENT APPLICATION NUMBER: US/10/424,599
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 285684
; SEQ ID NO 155063
; LENGTH: 247
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; OTHER INFORMATION: Clone ID: PAT_MRT3847_111043C.1.pap
US-10-424-599-155063
```


US-10-413-943-33

Query Match	26.3%;	Score 457;	DB 15;	Length 329;
Best Local Similarity	36.6%;	Pred. No. 3.4e-36;		
Matches	121;	Conservative 65;	Mismatches 117;	Indels 28; Gaps 11;
QY	7	ISFADVEKAHINIRDSIHLTPVTSSILNOLTGRNLFKCELFQKTGSFKIRGALNAVRS	66	
DB	9	VAIDDIIEAKORLAGRIYKTMPSRNVFSRCKGEIFLAFENQRTGSFKIRGAPNKLS	68	
QY	67	LVPDALEKPKXAVVTHSSGHHGALTYAAKLEIPIAYIVVPTADPCKKLAQIAYGASIV	126	
DB	69	LT-DA--EKRGVVACAGAHAGQVSSCAMLIGDKVVMPPKAGPKSVAAATCDYSAEVV	125	
QY	127	YCESDSDSRENVAKRVTE--ETEG-IMVHPNOEPAVIAGQGTIALEVLNOVPLDALVVP	193	
DB	126	L--HGDNFNDTIAK-VSEIIVEMEGRIFIPYDDPKVIAGQGTIGLEIMEDDYDNDVNVIP	182	
QY	184	VGGGMLAGTATYKALKPSKYAAEPSNADDYQSKLKGKLMNPIYYPETIADGVK-S	242	
DB	183	IGGGGLIAGTAAVKISNTPIRVIGQSENHVGMMAAFSPHSGEIITH-RTTGTIADGCVS	241	
QY	243	SIGLNTWPIIRDLVDDIFITVTEDEIKCATQLWERMKLLIEPTAGVGAVALS-----	295	
DB	242	RPGNLTVEIYVRELVDIIVLVSDEDIRNSMIALIQNKVVTEGAGUACAALLSGKLDQYI	301	
QY	296	QHFTQTSPEVKNICIVLSCGNVDLT--SSIT	324	
DB	302	QNRKTVS-----IISGNDIDLRSVQIT	324	

RESULT 13

```

US-10-425-114-39197
; Sequence 39197, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; FILE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 39197
; LENGTH: 499
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: 700350418_FLI pep
US-10-425-114-39197

```

Query Match	22.4%;	Score 388.5;	DB 15;	Length 498;
Best Local Similarity	33.4%;	Pred. No. 3,7e-29;		
Matches	99;	Conservative 64;	Mismatches 124;	Indels 9; Gaps 6;
QY	26	TPVLTSIIINQLTGRNLFFKCELPQKTGSPKIRGALNAVRSIVPDALERKPKAVVTHSSG	85	
Db	13	SPLQIASKLSHRLGWNLWIKREDLPQVSPKLRGAYNNMAKLSRBQLSR--GVICSSAG	69	
QY	86	NHGQALTVAAKLEGIPAYIVVVPQTAPDCKKALTQAYGASIVVYCEPSSDSRSENNAVKRTEE	145	
Db	70	NHAQGVALLSAORLGCDAVIVMPVTTPEIKWKSVERLGATVVLGSDYDEAQSIAKLRCCQ	129	
QY	146	TEGIMVHPNQBPVIAQOGHTIALEVLNV--PLVDALVVPVCGGMLAGIAITVTKALKPS	203	
Db	130	EDRTFIPFDHFDVITCGQVGVMEIVRQIQGLP-HAIFVPVGGGLIAGIAAAYVKRVPE	188	
QY	204	VKVYAAEFSNADDCYQSKLGGKMLPNLYPPETIADGVK--SSIGLNTWPIIRDLVDIIFTV	262	

```

Db      189 VKITGVPSDANAMALSXYHGKRV-MLBHVGFADGVAVKAVGSETFRLCREIVDGIVMV 247
          ||| : ||| : | ||| : | : : ||| | |
QY      263 TEDIKCATQLVWVERMKLIIETAGVGAAVLSQHFTQVSPEVKNICIVLSGNVD 318
          |||| : ||| : | ||| : | : : ||| | |
Db      248 SRDAICASIKDMFEERKSILEPAGALAGA-EAYCKYYLNKGDTVVVAITSGANNM 302
          ||| : ||| : | ||| : | : : ||| | |

RESULT 14
US-10-425-114-55647
; Sequence 55647, Application US/10425114
; Publication No. US20040034888A1
; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong
; APPLICANT: Zhou, Yihua
; APPLICANT: Kovalic, David K.
; APPLICANT: Screen, Steven E
; APPLICANT: Tabaska, Jack E
; APPLICANT: Cao, Yongwei
; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
; FILE REFERENCE: 38-21(53313)B
; CURRENT APPLICATION NUMBER: US/10/425,114
; CURRENT FILING DATE: 2003-04-28
; NUMBER OF SEQ ID NOS: 73128
; SEQ ID NO 55647
; LENGTH: 511
; TYPE: PRT
; ORGANISM: Zea mays
; FEATURE:
; OTHER INFORMATION: Clone ID: 700478009_FLI.pgp
US-10-425-114-55647

```

Query Match	22.3%;	Score 387.5;	DB 15;	Length 511;
Best Local Similarity	32.4%;	Pred. No. 4.8e-29;		
Matches 101;	Conservative 65;	Mismatches 123;	Indels 23;	Gaps 7;
Qy	24	HLTVLVTSSI-----LNLTGRNLFKCFELFQKTSFKIRGALNAVRSLVP	69	
Db	9	YLTSLVSKYVDVAIESPLOASKLSHRLGWNWIKREDLPQVFSKLRGYNMMAKLSR	68	
Qy	70	DALERKPAVVTHSSGNHGQALTYAAKLEGIPAYIVVPQAPDCKLAIQAYGASIVYCE	129	
Db	69	EQLER---GWICSSAGNHAQGVALSARLQCGDAVIMVPVTPPIKWKSVRLGATVVLEG	125	
Qy	130	PSDESRENNAKRVTEETEGIMVHPNOEPVIAIAGOGITALEVLNQV--PLVDALVVPVGGG	187	
Db	126	DSYDEAQSAYAKRCQQEDRTFIPEPDHPVITGQGTGMEIVRLOGLPL-HAIFVPVGGG	184	
Qy	188	GMLAGTAITVYALKPSVKVYAAPSDNADCCYSKLGKGLMPNLIYPPEITADGVK--SSIGL	246	
Db	185	GLTAGIAAAYVKVRPEVKYIGVFPSDANAMALSlyHKRV-MLEHVGGFADGVAVKAVGE	243	
Qy	247	NTPWPIIRLDVDDIFTVTEDEIKATOLVWERMKLLIETAGVGVAAVLQSHQFTTSPPEVK	306	
Db	244	ETFRLCRELVDGIVMVRDAICASIKDMFEKRSILLEPAGALALAGA-BAYCKYTNLKG	302	
Qy	307	NICIVLSGGNVD	318	
Db	303	TVVAITSGANN	314	

RESULT 15

```

US-10-413-943-29.
; Sequence 29, Application US/10413943
; Publication No. US20040006784A1
; GENERAL INFORMATION:
; APPLICANT: Mourad, George S,
; TITLE OF INVENTION: Methods and Compositions for Producing Plants and Microorganisms
; TITLE OF INVENTION: that Express Feedback Insensitive Threonine Dehydratase/Deaminase
; FILE REFERENCE: PRF-07898
; CURRENT APPLICATION NUMBER: US/10/413,943
; CURRENT FILING DATE: 2003-04-15

```

```
; NUMBER OF SEQ ID NOS: 69
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 29
; LENGTH: 576
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-10-413-943-29

Query Match      22.3%; Score 387.5; DB 15; Length 576;
Best Local Similarity 33.9%; Pred. No. 5.7e-29;
Matches 105; Conservative 59; Mismatches 131; Indels 15; Gaps 10;

QY 18 NIRDSTHLTPVLTSSTILNQLTGRNLPFKCFLFKGTGSKIRGALNAVRSLVPDALERKPK 77
Db 71 SVYDVINESPISOGVGLSSRLNTNVILKREDLLPVFSFKLRGAYNMIKLI--DDSORN-Q 127

QY 78 AVVTHSSGNHGQALTYAAKLEGIPAVIVPQTAPDCKKLAIQAYGASIV-YCEPSDESRE 136
Db 128 GVIACSGAGNHAGVAFPAKHLKIPATIVMPVCTPSIKYQNVSRLSGSQVLYGNDFFDEAKA 187

QY 137 NVAKRVTETEETEGIMVHPNOEPVIAAGGTIALEVLNQVPL---VDALVVPVGGGMLAGI 193
Db 188 ECAK-LAEERGLTNIPPFDPHPYVIAQGTVAMEILRQVRITANKIGAVFVPVGGGLIAGI 246

QY 194 AITVKALKPSVKVYAAEPSNADDCYQSKLKGKLMPLNLYPPETIADGVK-SSIGLNTWPII 252
Db 247 GAYLKRVPAPHIKTIGVETYDAATLHNSLORNQRTPLPVVGTADGTSVRMIGEETFRVA 305

QY 253 RDLVDDIFTVTEDEIKCATOLVWRMKLLIETPTAGVGVAAVLSQHFQTVSPV---KNIC 309
Db 306 QQVWDEVVLVNTDEICAAVKDIFEDTRSIPEPSGALSVAG-MKKYISTVHPHIDHTKNTY 364

QY 310 I-VLSCGNVD 318
Db 365 VPILSGANNW 374
```

Search completed: April 22, 2005, 16:42:21
Job time : 89.6303 secs

THIS PAGE BLANK (USPTO)